selection bias between groups. Administrative claims and medical records were utilized to assign patients NCEP risk status and corresponding LDL-C goal. Percent changes in lipid values were computed by comparing pre/post-initiation levels. Adjusted LDL-C change and goal attainment were evaluated using OLS and logistic regression techniques, respectively. **RESULTS:** A total of 453 patients (217 rosuvastatin/236 atorvastatin) were identified. Mean dose and therapy duration for rosuvastatin were 11mg and 61 days compared to 15mg and 79 days for atorvastatin. Patients receiving rosuvastatin compared to atorvastatin had significantly greater mean percent reductions in LDL-C (35% vs. 26%), total cholesterol (26% vs. 20%), and non HDL-C (33% vs. 25%); all $p < 0.05$. After adjusting for age, gender, baseline LDL-C, NCEP risk status, and therapy duration, reductions in percent LDL-C continued to be statistically significant. No statistically significant differences were found in HDL-C and triglycerides between groups. Percentages of patients achieving their LDL-C goal with rosuvastatin and atorvastatin were 74% and 65%, respectively. After adjusting for baseline differences between groups, significantly ($p < 0.05$) more patients were observed to achieve their LDL-C goal with rosuvastatin (OR = 1.87, 95% CI: 1.10–3.17). **CONCLUSION:** Rosuvastatin was associated with statistically significant reductions in LDL-C, non HDL-C, and total cholesterol compared to atorvastatin. Furthermore, rosuvastatin patients were nearly twice as likely to attain their LDL-C goal compared with atorvastatin when adjusted for baseline differences between groups.

CV3

ONE-YEAR COSTS FOR ACUTE CORONARY SYNDROME—AN INTEGRATED HEALTHCARE SYSTEM PERSPECTIVE

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OBJECTIVES: Little information exists regarding costs of acute coronary syndrome (ACS) in the setting of an integrated health care program. The purpose of this study was to estimate total costs of new onset ACS from index hospitalization through one year. **METHODS:** This descriptive analysis consisted of Kaiser Permanente Medical Care Program patients age > 40 years and hospitalized with an ACS diagnosis during January 1, 1999 to December 31, 2000. Patients were required to be without ACS diagnoses in the six months before the index event. Follow-up continued for one year. A gender and age matched control group was created at a 5 : 1 ratio (control : ACS patient). Costs expressed are those incurred by the health plan. **RESULTS:** In total, 14,852 patients met inclusion criteria (7919 myocardial infarction [MI], 6933 unstable angina [UA]). Mean age was 67.2 years, and 63.9% were male. During the first year after the index event, rehospitalization occurred in 13.5% of patients for MI, 17.2% for UA, and 38.5% for all coronary heart disease. Index hospitalization costs were $6802 for ACS cases. Total costs (mean ± SD) from discharge through one year were $20,743 ± 30,159 ($12,163 median) for ACS cases and $3679 ± 12,495 ($1089 median) for controls. Males and females with ACS had similar mean costs ($20,894 ± 31,179 vs. $20,475 ± 28,262) while ACS cases age >65 ($21,354 ± 27,904) had somewhat higher mean costs than those age <65 years ($19,862 ± 33,126). Percent of total costs by type of resource used (clinic, hospital, and pharmacy, respectively) for ACS cases was: 19.4%, 70.3%, 6.2%; for controls: 38.4%, 43.5%, 13.0%. **CONCLUSIONS:** Hospitalization for ACS was associated with substantial costs for the index event as well as large additional costs through one year. The largest contributor of costs was hospital-related (70%). Rehospitalization also occurred frequently in ACS patients.

CV4

CUMULATIVE EXPOSURE TO CYCLOOXYGENASE-2 INHIBITORS AND CARDIOVASCULAR RISK

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OBJECTIVES: Little is known about the association of length of exposure to COX-2 inhibitors (COX-2s) and the risk of cardiac events. This study determines the impact of extended exposure to COX-2s among high risk Medicaid patients, and is based on a previous propensity adjusted model that showed no added risk of cardiac events in COX-2 versus NSAID users, in this Medicaid population. **METHODS:** Selecting COX-2 users alone, we analyzed all medical and prescription claims of all continuously enrolled Medicaid patients, with at least one prescription for a COX-2 between January 1, 2000 and January 1, 2003, and no such prescriptions in the first six months. We used both direct adjustment and propensity score methods, and assessed length of exposure to COX-2s as a risk factor for post-use cardiac events, defining risk as a categorical variable (<30, 30–59, 60–89, 90–119 and >120 days), then as a continuous variable (divided by 30). The models are adjusted for age, gender, race and location (urban/suburban/rural), and clinical risk factors. **RESULTS:** A total of 1784 patient used COX-2s, 25% for less than 30 days. From the categorical analysis, there are significant increases in the likelihood of a post-use cardiac event given increased use compared to less than 30 days of cumulative exposure. From the analysis of exposure to COX-2s as a continuous variable, in the propensity-adjusted model, each 30-day increase in exposure corresponds to a concomitant but non-significant 2% increase in risk of cardiac events. For the direct adjusted model, there is a concomitant 5.5%, significant increase in post-use cardiac events. **CONCLUSIONS:** Among Medicaid COX-2 users, the risk of cardiac events is associated with longer exposure to COX-2s only when exposure is categorized in 30-days increments, but not when used as a continuous variable, suggesting a nonlinear relationship between exposure and events.

Cost Studies I

CS1

ECONOMIC BURDEN OF OSTEOPOROSIS-RELATED FRACTURES IN MEDICAID

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OBJECTIVE: For women over age 45 that experience osteoporosis-related fractures (OPFx), Medicaid covers about 25% while Medicare covers nearly one-half of the related-health care cost. This study estimated the direct cost of OPFx to state Medicaid budgets. **METHODS:** This retrospective analysis utilized Medicaid claims databases from three states. The databases contained the claims experience of approximately eight million Medicaid recipients. The study sample consisted of Medicaid beneficiaries with at least one claim containing an osteoporosis diagnosis (733.0x) between January 1, 1999 and December 31, 2001. Beneficiaries with a fracture and a diagnosis of osteoporosis were assigned to the case cohort; a propensity score-based matching method was used to select a cohort of controls among a pool of beneficiaries with osteoporosis, but without a fracture. An exponential conditional mean model was used to estimate the incremental annual cost associated with fracture.